

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	139	("4255523" "4311567" "4433082" "4528083" "4698243" "5041195" "5133842" "5183713" "5190813" "5350643" "5547551" "5599614" "5635041").PN. or ("2393967" "2559752" "2593583" "2681319" "2827426" "2951818" "2965697" "20030113604" "3041317" "3214501" "3640829" "3679540" "3870593" "3953566" "3962153" "0037307" "0037656" "0037701" "4012303" "4065534" "4096222" "4096227" "4100238" "4110390" "4178218" "4186076" "4187390" "4197148" "4207163" "4207164" "4210510" "4224121" "4262041" "4267364" "4313832" "4429000" "4437951" "4469744" "4518650" "4539256" "4544458" "4568441" "4629563" "4664801" "4720400" "4726989" "4774039" "4804592" "4849311" "4863604" "4865930" "4931168" "4985296" "4990228" "4997567" "5066403" "5075006" "5082475" "5124018" "5154827" "5183713" "5186877" "5209850" "5234777" "5256503" "5275725" "5288384" "5322602" "5336384" "5356663" "5415888" "5422411" "5425865" "5447636" "5468574" "5472799" "5521023" "5523181" "5545475" "5547911" "5597659" "5766787" "5795668" "6254978").PN. or ("3497394" "4107005" "4515906" "4724157" "4731263" "4781767" "4835007" "4875908" "4895775" "5087767" "5094895" "5188890" "5228994" "5266421" "5336573" "5338412" "5438082" "5453333" "5531899" "5599638" "5602669" "5672438" "5874182" "5882723" "6130175" "6242135" "6635384").PN. or ("5147722").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/25 11:14
L2	35	L1 and surfactant	US-PGPUB; USPAT	OR	ON	2007/10/25 14:20
L3	0	1 and (boil with swelling)	US-PGPUB; USPAT	OR	ON	2007/10/25 14:20
L4	9	1 and (agent with swelling)	US-PGPUB; USPAT	OR	ON	2007/10/25 14:21
L5	2	1 and (boil)	US-PGPUB; USPAT	OR	ON	2007/10/25 14:21

## EAST Search History

L6	42	1 and (boil\$3)	US-PGPUB; USPAT	OR	ON	2007/10/25 14:27
L7	1	("3684747").PN.	US-PGPUB; USPAT	OR	OFF	2007/10/25 14:25
L8	7	1 and (boil\$3 with swell)	US-PGPUB; USPAT	OR	ON	2007/10/25 14:31
L9	45326	"ion exchange resin"	US-PGPUB; USPAT	OR	ON	2007/10/25 14:31
L10	178390	impregnat\$3	US-PGPUB; USPAT	OR	ON	2007/10/25 14:31
L11	123147	swell\$3	US-PGPUB; USPAT	OR	ON	2007/10/25 14:32
L12	3820	"transport rate"	US-PGPUB; USPAT	OR	ON	2007/10/25 14:32
L13	14	9 with 10 and 11 same 12	US-PGPUB; USPAT	OR	ON	2007/10/25 14:32

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S2	3	((("4902308") or ("4453991") or ("4954388")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/29 16:52
S3	11	((("4902308") or ("4453991") or ("4954388") or ("3692569") or ("5082472") or ("5094895") or ("5183545") or ("4341615") or ("4604170") or ("4865925")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/29 17:36
S4	1	S3 and (ohm or mho or ohms or mhos)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/29 17:24

## EAST Search History

S5	222	(ohm or mho or ohms or mhos) adj (min or minute)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/30 11:07
S6	2	(ionic adj conductance adj rate)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/29 17:25
S7	67	(conductance adj rate)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/29 17:25
S8	139	("4255523" "4311567" "4433082" "4528083" "4698243" "5041195" "5133842" "5183713" "5190813" "5350643" "5547551" "5599614" "5635041").PN. or ("2393967" "2559752" "2593583" "2681319" "2827426" "2951818" "2965697" "20030113604" "3041317" "3214501" "3640829" "3679540" "3870593" "3953566" "3962153" "0037307" "0037656" "0037701" "4012303" "4065534" "4096222" "4096227" "4100238" "4110390" "4178218" "4186076" "4187390" "4197148" "4207163" "4207164" "4210510" "4224121" "4262041" "4267364" "4313832" "4429000" "4437951" "4469744" "4518650" "4539256" "4544458" "4568441" "4629563" "4664801" "4720400" "4726989" "4774039" "4804592" "4849311" "4863604" "4865930" "4931168" "4985296" "4990228" "4997567" "5066403" "5075006" "5082475" "5124018" "5154827" "5183713" "5186877" "5209850" "5234777" "5256503" "5275725" "5288384" "5322602" "5336384" "5356663" "5415888" "5422411" "5425865" "5447636" "5468574" "5472799" "5521023" "5523181" "5545475" "5547911" "5597659" "5766787" "5795668" "6254978").PN. or ("3497394" "4107005" "4515906" "4724157" "4731263" "4781767" "4835007" "4875908" "4895775" "5087767" "5094895" "5188890" "5228994" "5266421" "5336573" "5338412" "5438082" "5453333" "5531899" "5599638" "5602669" "5672438" "5874182" "5882723" "6130175" "6242135" "6635384").PN. or ("5147722").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/30 08:15

## EAST Search History

S9	95	S8 and (ohm or mho or resistance or conductance or resistivity or conductivity)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/30 09:40
S10	1	("6254978").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/30 10:18
S11	4	((("4902308") or ("4515906") or ("5338412") or ("5087766"))).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/10/22 15:20
S12	195	(ohm or mho or ohms or mhos or seimen or seimens) near2 (min! or minute)	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/24 09:50
S13	79	(ohm or mho or ohms or mhos or seimen or seimens) near (min! or minute)	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/24 09:52
S14	40	(ohm or mho or ohms or mhos or seimen or seimens) adj (min! or minute)	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/24 09:52

## EAST Search History

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S16	11	S15 and "perfluorinated sulfonic"	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/24 13:51
S17	1	("3593566").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/04/24 14:32
S18	1	("3953566").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/04/24 16:02

## EAST Search History

S19	734	("sulfonic acid" same ion adj exchange) and (PTFE or polytetrafluorethylene)	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/25 09:22
S20	475	("sulfonic acid" same ion adj exchange) and (PTFE or polytetrafluorethylene) and "fuel cell"	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/25 09:22
S21	125	("sulfonic acid" same ion adj exchange) and (PTFE or polytetrafluorethylene) and ("1980" or "1981" or "1982" or "1983" or "1984" or "1985" or "1986" or "1987" or "1988" or "1989" or "1990" or "1991" or "1992" or "1993" or "1994").py.	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/25 09:25
S22	136	("sulfonic acid" same ion adj exchange) and (PTFE or polytetrafluorethylene) and @PY<"1995"	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/22 13:29
S23	2550	impregnat\$3 with ("major surface" or "both sides")	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/22 13:29
S25	2	impregnat\$3 with ("major surface" or "both sides") and @py<"1995" and "ion exchange resin"	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/22 13:31
S26	861	impregnat\$3 with ("major surface" or "both sides") and @py<"1995" and resin	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/22 13:31
S27	351	resin with impregnat\$3 with ("major surface" or "both sides") and @py<"1995"	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/22 13:44

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S28	139	("4255523" "4311567" "4433082" "4528083" "4698243" "5041195" "5133842" "5183713" "5190813" "5350643" "5547551" "5599614" "5635041").PN. or ("2393967" "2559752" "2593583" "2681319" "2827426" "2951818" "2965697" "20030113604" "3041317" "3214501" "3640829" "3679540" "3870593" "3953566" "3962153" "0037307" "0037656" "0037701" "4012303" "4065534" "4096222" "4096227" "4100238" "4110390" "4178218" "4186076" "4187390" "4197148" "4207163" "4207164" "4210510" "4224121" "4262041" "4267364" "4313832" "4429000" "4437951" "4469744" "4518650" "4539256" "4544458" "4568441" "4629563" "4664801" "4720400" "4726989" "4774039" "4804592" "4849311" "4863604" "4865930" "4931168" "4985296" "4990228" "4997567" "5066403" "5075006" "5082475" "5124018" "5154827" "5183713" "5186877" "5209850" "5234777" "5256503" "5275725" "5288384" "5322602" "5336384" "5356663" "5415888" "5422411" "5425865" "5447636" "5468574" "5472799" "5521023" "5523181" "5545475" "5547911" "5597659" "5766787" "5795668" "6254978").PN. or ("3497394" "4107005" "4515906" "4724157" "4731263" "4781767" "4835007" "4875908" "4895775" "5087767" "5094895" "5188890" "5228994" "5266421" "5336573" "5338412" "5438082" "5453333" "5531899" "5599638" "5602669" "5672438" "5874182" "5882723" "6130175" "6242135" "6635384").PN. or ("5147722").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/22 13:38
S29	59	S28 and impregnat\$3	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/22 13:38
S30	242681	impregnat\$3	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/22 13:39
S31	6	S28 and S30 with "both sides"	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/22 13:39



## EAST Search History

S32	1204	resin with impregnat\$3 with (immersed or bath) and @py<"1995"	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/22 13:44
S33	2	ion with exchange with resin with impregnat\$3 with (immersed or bath) and @py<"1995"	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/22 13:44
S34	20	ion with exchange with resin same impregnat\$3 with (immersed or bath) and @py<"1995"	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/22 14:10
S35	6	nafion with surfactant same impregnat\$3	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/22 14:13
S36	21	nafion with surfactant	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/22 14:37
S37	52	nafion same surfactant	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/22 14:37
S38	1	("6254978").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/10/22 15:20